ECOLOGY AND ENVIRONMENT, INC.

DALLAS, TEXAS

MEMORANDUM

TO: David Wineman, RPO Region VI

THRU: K. H. Malone, Jr., FITOM

FROM: Brenda Nixon Cook, FIT Chemist

DATE: May 10, 1988

SUBJ: Sampling Plan for Gary Job Corps facility, San Marcos, Texas
(TX1161630644)
TDD# F06-8802-20
PAN FTX0529SBA

The FIT previously submitted a Site Inspection Report (EPA T2070-3) to EPA on February 18, 1988 regarding the Gary Job Corps facility at San Marcos. As indicated, historical aerial photographs of the site had been requested in order to locate previous waste disposal areas to aid in the development of a sampling plan. Additional background information gathered by the FIT is also included in this memorandum.

In 1965, the Department of Defense closed Camp Gary as a military airbase, and deeded the airport and the land northeast of the facility to the City of San Marcos. The Department of Labor obtained the main base and surrounding buildings in 1965 for use by the Gary Job Corps as their educational campus. Previous investigations by the FIT at the Gary Job Corps facility indicated three areas of concern, i.e. 1) possible PCB contamination of the soil from the 341 electric transformers in storage at this facility; 2) alleged burial of tetraethyl lead by the military in the mid-1950s; and 3) the former City of San Marcos landfill.

The earlier site inspection report submitted to EPA indicated that the Department of Labor appears to be responding adequately to the problem of the electric transformers at the facility. However past practices concerning handling and storage of these transformers are unknown and for this reason soils which may in the past had continual contact with these transformers may have been contaminated by PCBs. With the construction and modification of building 9-356 at the facility, there now exists a well contained storage area for these transformers. Prior to moving the transformers to building 9-356, all transformers not in use were stored in the transformer utility yard near building 11-215. For this reason the soil near building 11-215 should be sampled. On September 17, 1987 a transformer pole broke near building 7-102 and a electric transformer fell to the ground leaching possible PCB contaminated oil onto the ground. Topsoil near the area where the pole broke was removed and drummed as PCB contaminated soil. Soils near where the transformer pole broke should be sampled to ensure that all PCB contaminated soil was adequately removed.

Due to the lack of information concerning past military landfills and the location of the alleged burial of tetraethyl lead at this facility, the FIT requested historical aerial photographs to help determine past waste disposal practices and locations. In a conversation with Mr. Monocure, Gary Job Corps Center Environmental Coordinator, on October 21, 1987, he stated that he believed that the military had once operated a landfill northeast of the main base area and two fuel dumps, one at the east and one at the west ends of the airport ramp. Aerial photographs from 1951 show no landfill activity in the area. Aerial photographs of the area northeast of the main base from 1958 indicate possible landfill activities, thus supporting the earlier allegation that tetraethyl lead may have been buried at this facility in the mid-1950s. In a conversation with Mr. Monocure on April 26, 1988 he stated that he could locate the previous military landfill at the facility. No records for wastes exist for the military landfill; however Mr. Monocure stated that the military first burned and then buried the remaining wastes. Soil samples taken around the perimeter of the military landfill and at each fuel dump would determine the presence of contamination, if any, from the previous military waste disposal practices.

In addition to the threat of PCB contamination from the electric transformers and the alleged burial of tetraethyl lead at the facility there also exists possible contamination of the alluvial aquifer from the City of San Marcos Municipal Landfill located in the area northeast of the main base facility. The municipal landfill appears to have been located east of and adjacent to the military landfill, based on interpretation of the historical aerial photos. Since submission of the site inspection report the EPA has received inquiries from several sources concerning possible contamination of the alluvial aquifer underlying the closed San Marcos Landfill. According to records from the Texas Department of Health the municipal landfill occupied an 84 acre tract of land northeast of the main base facility from 1969-1984. During this time approximately 1,825,320 cubic yards of solid waste were deposited. In a 1966 aerial photo, there appears to be considerable activity in the area northeast of the main base where the municipal landfill is located; however this area was not permitted for landfill activities until June of 1969. In a conversation with Mr. Monocure on April 26, 1988, he stated that he believed that dumping by the City of San Marcos began prior to 1969.

The Texas Department of Health records for the San Marcos Municipal Landfill provided the following geological information: the alluvial layer of the soil beneath the landfill consists of silty clay layers followed by a sand/gravel water bearing zone located at a depth of 15 - 20 feet. Records indicate that the trench type landfill operated by the city was not to go below 12 feet in depth leaving a 3 feet clay bottom to serve as a natural liner. Complaints from citizens suggesting that this 3-ft clay layer had not been maintained were included the Department of Health files.

Water usage in this area is provided by three separate sources. Water for the Job Corp residents is provided by the City of San Marcos. Other area residents are either using their own water wells or are members of the Maxwell Water Supply Corporation. The majority of residents use the Maxwell Water Supply Corp for drinking and their own well water for watering yards, gardens, and livestock. A small portion of the surrounding community does rely solely on the alluvial aquifer for their total water usage. A well

survey for the area would better determine water usage of the alluvial aquifer and provide data for a more strategic sampling of the wells surrounding the municipal landfill.

Due to the recent inquiries concerning the quality of the water in the alluvial aquifer surrounding the Camp Gary facility it is recommended that all three potential sources of contamination be examined. In addition to sampling ground water wells in close proximity to the municipal landfill and the earlier military landfill, areas on the main base facility that might have been contaminated by PCB electric transformers stored on this facility should also be sampled.

Attached is the proposed sampling plan.

Sampling Plan for Gary Job Corp and San Marcos Municipal Landfill
TX1161630644

Groundwater wells

Sampling locations are based on an old well survey(1976) found in the Texas Department of Health File. During several phone calls trying to validate the survey, it was evident that a new well survey would be needed to obtain more accurate information to provide a representative sampling of the groundwater in the area surrounding the San Marcos Municipal Landfill. Locations may change based upon results of the proposed well survey.

Sample Number	Station Number	Sample Location Description
1	1	Residential Well belonging to (b) (6) (b) (6) approximately 300 ft east of San Marcos Municipal Landfill (QA\QC)
2	2	Residential Well belonging to (b) (6) northeast of San Marcos Municipal Landfill. (Background)
3	3	Residential Well belonging to (b) (6) (b) (6) southeast of San Marcos Municipal Landfill.
4	4	Residential Well belonging to (b) (6) (b) (6) southeast of San Marcos Municipal Landfill.
5	5	Residential Well belonging to (b) (6) south of San Marcos Municipal Landfill
6	6	Residential Well belonging to (b) (6) south of San Marcos Municipal Landfill. Duplicate of 5.
7	7	Residential Well belonging to (b) (6) south of San Marcos Municipal Landfill.

8	8	Residential Well belonging to (b) (6) south west of San Marcos Municipal Landfill.
9	9	Residential well Reedville Area south of San Marcos Municipal Landfill.
10	10	Residential well Reedville area south of San Marcos Municipal Landfill.
11	11	Residential Well belonging to (b) (6) (b) (6) southwest of San Marcos Municipal Landfill and Gary Job Corp Facility.
12	12	Residential Well belonging to (b) (6) (b) (6) southwest of San Marcos Municipl Landfill and Gary Job Corp Facility.
13	13	Residential Well belonging to (b) (6) northwest of San Marcos Municipal Landfill and Gary Job Corp Facility (Background).
Monitoring Wells		
14	14	Monitoring Well 1B San Marcos Municipal Landfill- Up Gradient
15	15	Monitoring Well 3, San Marcos Municipal Landfill- Down Gradient (QA\QC)
16	16	Monitoring Well 4B, San Marcos Municipal Landfill- Down Gradient
17	17	Monitoring Well 4B, San Marcos Municipal Landfill- Down Gradient. Duplicate of 16
Soils and Sediments		
18	18	East of previous military landfill site. Sample taken at depth of 4-6 ft.

19	19	West of previous military landfill site. Sample taken at depth of 4-6 ft.
20	20	South of previous military landfill site. Sample taken at depth of 4-6 ft.
21	21	North of previous military landfill site. Sample taken at depth of 4-6 ft.
22	22	East fuel dump. Sample taken at depth of 4-6 ft.
23	23	West fuel dump. Sample taken at depth of 4-6 ft.
24	24	Soil near building 7-102 where transformer fell . Surface Soil.
25	25	Soil near building 7-102 where transformer fell. Sample taken at depth of 4-6 ft.
26	26	Soil in former transformer Utility Yard building 11-215. Surface Soil (QA|QC).
27	27	Soil in former transformer Utility Yard building 11-215. Sample taken at depth of 4-6 ft.
28	28	Soil in former transformer utility yard building 11-215. Sample taken at depth of 4-6 ft. Duplicate of 27.
29	29	Background soil taken near well #13 (b) (6) northwest of facility.
30	30	Background soil taken near well #2 (b) (6) northeast of facility.

RECORD OF COMMUNICATION	(Record of Item Checked Below) _X_Phone Call ___Discussion ___Field Trip ___Conference ___Other(Specify)	
TO: Dick Monocure Environmental Coordinator, Gary Job Corp	From: Brenda Nixon Cook FIT Chemist	Date: April 26, 1988 Time: 12:06

SUBJECT Possible areas of contamination at Gary Job Corps Facility

SUMMARY OF COMMUNICATION

Mr. Monocure confirmed that the transformer fell near building 7-102 and that prior to moving the transformers to their present location they had been stored in the utility yard near building 11-215. Mr. Monocure also stated there had been gravel excavation east of the facility from 1951-1965. He confirmed that Gary Job Corps had first occupied the facility in 1965 and at that time the airport and the land northeast of the facility had been deeded to the City of San Marcos. He also said he believed the city began dumping in about 1965. He stated that during the military occupation of the facility, a landfill had existed in the near vicinity of the municipal landfill. He also stated that he could pinpoint the location of the previous military landfill. When asked about the current status of PCB contaminated trnasformer and soil, he stated that pending release of funds, removal would begin. Had already contracted for removal and would call me back with the particulars.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

EPA FORM 1300-6 (7-72)
Replaces EPA HQ Form 5300-3 which may be used until Supply is Exhausted.

RECORD OF COMMUNICATION	(Record of Item Checked Below) _X_Phone Call ___Discussion ___Field Trip ___Conference ___Other(Specify)	
TO: Brenda Cook	From: Dick Monocure	Date: April 26, 1988 Time: 3:47

SUBJECT Name of contractor removing PCB soil transformers at Gary Job Corp

SUMMARY OF COMMUNICATION

United Power Services

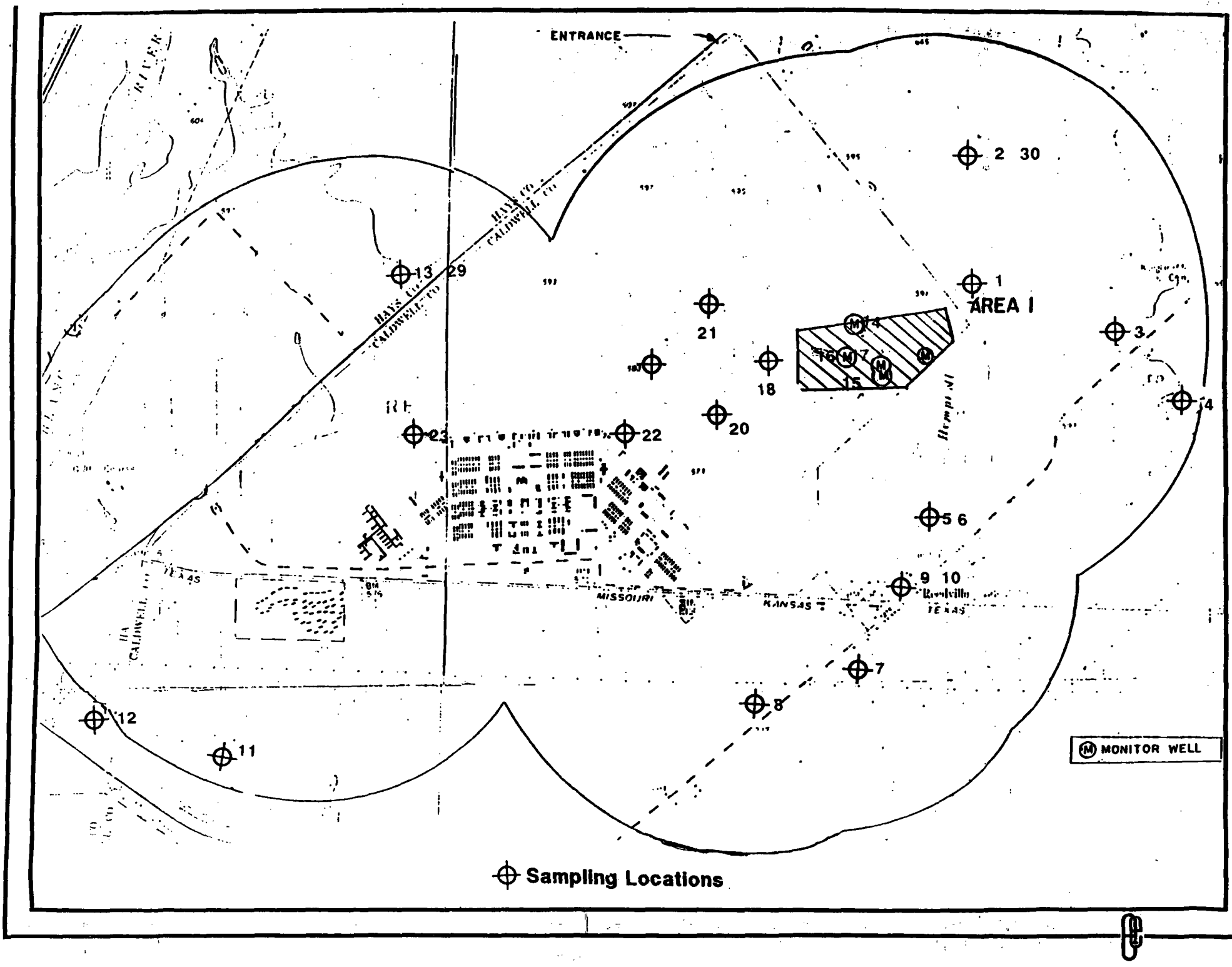
313 Hill Avenue

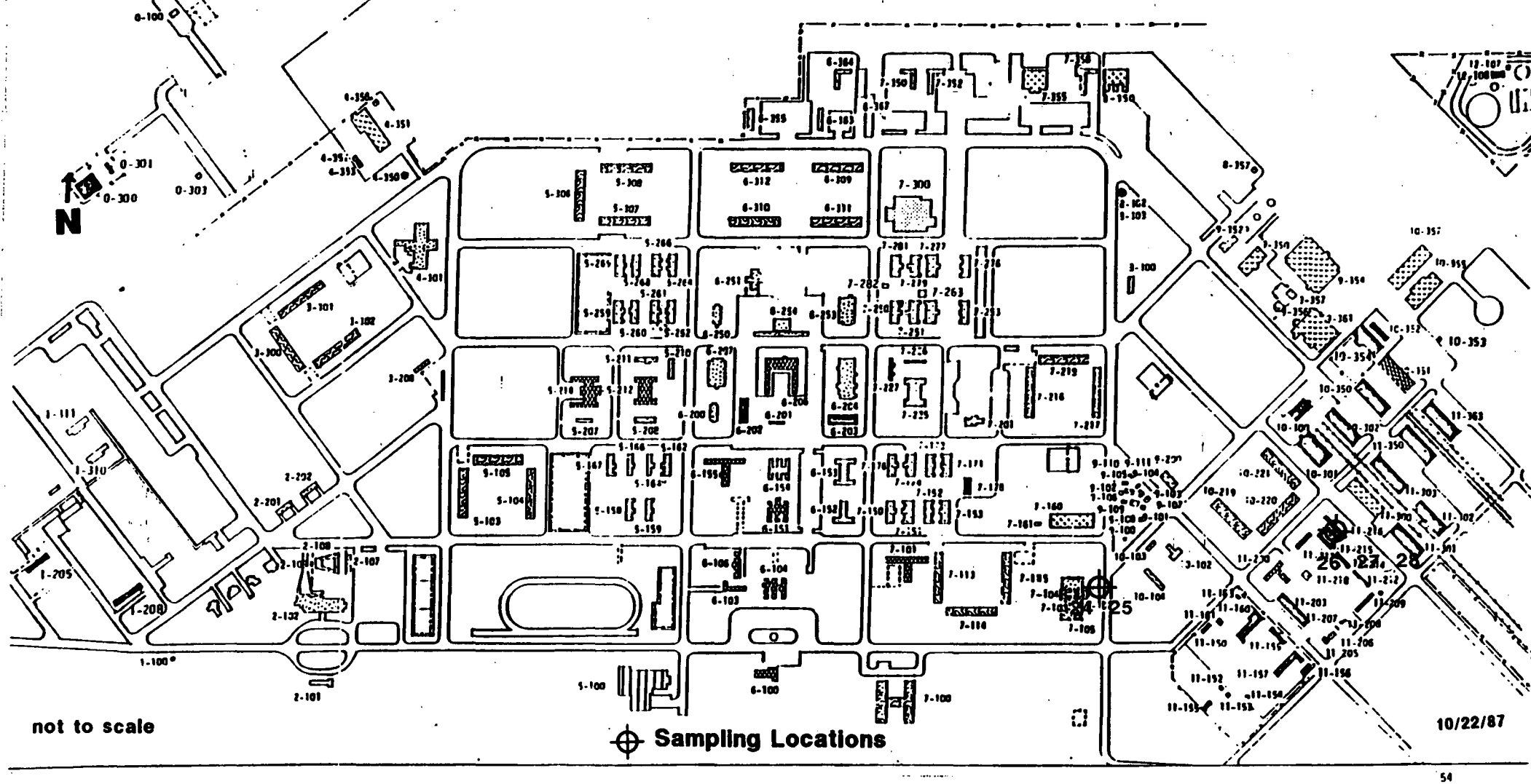
Nashville, Tennessee owner-Larry Christodowou (615) 255-3700

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

EPA FORM 1300-6 (7-72)
Replaces EPA HQ Form 5300-3 which may be used until Supply is Exhausted.


ENTRANCE
2 30
13 29
1
AREA I
21
14
3
16
17
15
18
4
20
23
22
5 6
9 10
MISSOURI
KANSAS
TEXAS
7
8
12
11
MONITOR WELL
Sampling Locations

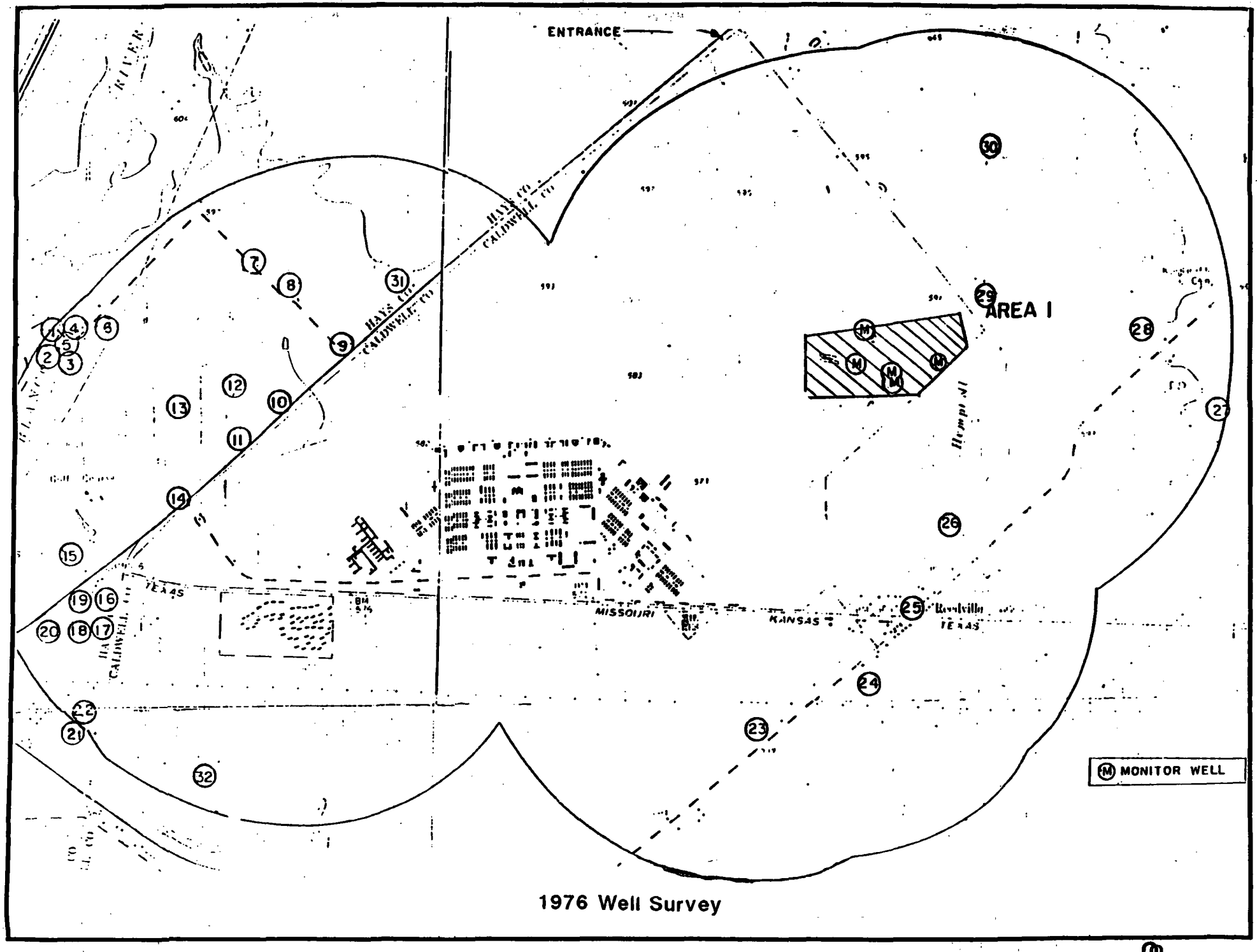


GARY JOB CORPS CENTER

SITE SKETCH

San Marcus, Tx. **Caldwell County**

TX1161630644



1976 Well Survey

1976 Well Survey

Water Well Information

1. 60' house use (b) (6)
2. 60' yard use
3. 50' house-drilled (b) (6)
4. 50' each 2 house-1 dug-1 drilled (Victory Cleaners)
5. 50' house use-drilled (b) (6)
6. 50' each yard and stock use-(2 wells) 1 across road on Maxwell (b) (6)
7. 50' Stock use-dug
8. 50' each stock and garden-Maxwell (b) (6)
9. 50' Stock use (b) (6)
10. 40' house use
11. 40' house use
12. 40' house use
13. 40' stock use
14. 50' house use
15. 35' not in use-Quail Creek-dug well
16. 30' public use-dug well (Luersen Trailor Park)
17. 50' yard use-dug well (b) (6)
18. 50' yard use (b) (6)
19. 50' house use (b) (6)
20. 50' each not in use - dug wells (b) (6)
21. 70' drilled-30' dug house with 1 public supply (b) (6) (b) (6)
22. 50' not in use
23. 40' yard use (b) (6)

24. 35′ yard use-dug (b) (6) [redacted]

25. 30′ to 50′ 15 wells 10 house use Reedville Area

26. 35′ each (2 wells) 1 house use-dug (b) (6) [redacted]

27. 60′ each (3 wells) Stock use (b) (6) [redacted]

28. 30′ house use-dug (b) (6) [redacted]

29. 30′ (2 wells) 1 house and 1 abandon

30. 70′ stock use (b) (6) [redacted]

31. 50′ house use

32. 35′ house use-dug well (b) (6) [redacted]

RECORD OF COMMUNICATION

[X] Phone Call [ ] Discussion [ ] Field Trip
[ ] Conference [ ] Other(Specify)

(Record of Item Checked Above)

TO:
Dick Moncure
Evironmental Coordinator
Gary Job Corp. Center

FROM:
Brenda Nixon Cook
FIT Chemist

DATE
10-21-87

TIME
1500

SUBJECT
Status of PCB transformers&possible location of past landfills.

SUMMARY OF COMMUNICATION

Mr. Moncure confirmed the date that the transformer pole broke was 9-17-87 and that the building number for the transformer storage facility was 9-356. He stated that the cit one time had a municipal landfill east of the airstrip. When asked about previous milita landfills, he stated that he thought there had been 2 fuel dumps, one at the east and on at the west end of the airport ramp, and 2 or 3 landfills northeast of the airstrip. When tioned about the probable location of the buried tetraethyl lead, he said he did not kn for sure but his guess would be near the fuel dumps.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES TO:

EPA Form 1300-6 (7-72)
Replaces EPA HQ Form 5300-3 Which May Be Used Until Supply is Exhausted.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE APR 16 1985

SUBJECT Pollution Control Screening at Gary Job Corps Center, San Marcos, Texas

FROM Jim Highland, P.E.
Federal Facilities Compliance Coordinator (6ES-FA)

TO File, Gary Job Corps Center, San Marcos, Texas

On Tuesday, April 9, 1985, I visited the subject Federal Facility to survey pollution control facilities and activities relative to implementation of Executive Order 12088 and the requirements of the environmental laws administered by EPA. This survey is part of a regional initiative to screen significant minor Federal Facilities (FF) not currently in the sphere of FF receiving regular compliance inspections by the State and/or EPA. These surveys are intented to surface any obvious or apparent problems needing correction or warranting closer investigation through follow-up compliance inspections. The visits are informal and consultative in nature and this report should not be interpreted as a formal finding of actual compliance status.

Gary Job Corps Center (GJCC) is located on 817 acres of land approximately 1 mile northeast of San Marcos, Texas on State Highway No. 21. It is a residential vocational training center for economically pressed youth who have dropped out of school and are unable to find jobs. It provides vocational training in 24 areas of the building, construction, manufacturing and automotive trades, service occupations and special programs. Basic education courses are also provided in support of the vocational training. Current GJCC population is approximately 2,500 resident and 600 non-resident. GJCC has its own power, natural gas and water distribution and sewage collection and disposal systems. Solid waste collection and disposal and pesticide control services are contracted to outside firms. Air, solid waste and wastewater emissions sources include dormitories and other residences, service and educational buildings, dining halls, shops (carpentry, sheet metal, welding, machine, printing, automotive and heavy equipment repair), heavy equipment operation and storage and transfer facilities for automotive and diesel fuel.

My primary contacts and guides for the survey were Mr. Dick Moncure, Environmental Coordinator, and Mr. Mo Gloria. During the screening, I identified no apparent problems in the areas of air and water pollution control under the CAA and CWA, RCRA waste handling and disposal, pesticides use and handling, nor their activities covered under the Safe Drinking Water Act. However, I did note the following apparent violations or potential problems connected with their CERCLA and TSCA activities:

1. CERCLA (Superfund) Activities.

Since December, 1964, the Job Corps has occupied a part of a former military air base of WWII vintage (1943), and GJCC personnel have little information concerning possible hazardous materials and waste handling and disposal activities of the former military tenants. Mr. Moncure told me he was there for a while before the Job Corps took over their portion, and he knows there was some landfilling being done at that time. He said he's not sure about any hazardous wastes being buried there during the military operation, but he thinks there may have been some tetraethyl lead buried then. GJCC has also conducted some on-site landfilling, but Mr. Moncure said he knows of no hazardous wastes buried during that time, only refuse, some garbage and some construction and demolition debris. I told him CERCLA and Executive Order 12088 require Federal agencies to review their past activities, determine whether any of those activities are potential hazardous waste problems, and take whatever remedial steps are necessary to eliminate the problems. I suggested he contact the Department of Defense (DOD) Former Sites Program (FSP) to see if they have investigated, or plan to investigate, the problem potential at the Gary facility. If not, GJCC should request a DOD investigation, and any necessary remedial actions, under the FSP.

2. TSCA Regulated Activities.

GJCC has a large number (100+) of electrical power tranformers in service or in storage for either future use, repair or disposal. Many of these transformers were inherited from the former military owners, and Job Corps personnel have no information whether or not any of them contain PCBs. GJCC has set up no PCB records system, labeled no transformers, tested no dielectric fluid, nor attempted to confirm the existence of PCBs. Some transformers sitting in a storage yard were observed to be leaking and oil stains were visible on the ground. Most of the transformer nameplates observed either had no information as to type of dielectric or were not clear whether the fluid could be PCB-contaminated. I recommended they immediately implement a program to determine the presence of PCBs in those transformers not currently in service, especially those which are leaking, and set up the required PCB records system if necessary. I also suggested they may need to provide a regulation storage facility for some of their transformers. Mr. Moncure advised me that they have already ordered some test kits to begin testing transformers for PCBs and will provide labeling, recordkeeping and storage as necessary to comply with PCB regulations, if PCBs are found.

CONCLUSION: It appears that immediate future follow-up activity in connection with the GJCC may appropriately be limited to monitoring the progress of (1) necessary CERCLA investigations and/or remedial actions to confirm fulfillment of CERCLA responsibilities and (2) the Center's efforts to assure compliance with the PCB regulations. The need for an early follow-up TSCA compliance inspection will be left to the judgement of the regional TSCA enforcement program. No immediate follow-up visits are recommended for the other media programs at this time.

cc: McKee, 6AW-SC
Mount, 6AW-P
Frey, 6AW-AE
Ferguson, 6W-EC
Brown, 6AW-HC
Murpny, 6AW-PP
Graham, 6W-SP